

10/670,535

Thomas McKenzie

Connecting via Winsock to STN

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* * * * * * * * * * * * * * * * Welcome to STN International * * * * * * * * * * * * * * *

| | | |
|--------------|----|--|
| NEWS | 1 | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS | 2 | "Ask CAS" for self-help around the clock |
| NEWS | 3 | May 12 EXTEND option available in structure searching |
| NEWS | 4 | May 12 Polymer links for the POLYLINK command completed in REGISTRY |
| NEWS | 5 | May 27 New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus |
| NEWS | 6 | May 27 CAplus super roles and document types searchable in REGISTRY |
| NEWS | 7 | Jun 28 Additional enzyme-catalyzed reactions added to CASREACT |
| NEWS | 8 | Jun 28 ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R) |
| NEWS | 9 | Jul 12 BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS |
| NEWS | 10 | Jul 30 BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting |
| NEWS | 11 | AUG 02 IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields |
| NEWS | 12 | AUG 02 CAplus and CA patent records enhanced with European and Japan Patent Office Classifications |
| NEWS | 13 | AUG 02 STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting |
| NEWS | 14 | AUG 02 The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available |
| NEWS | 15 | AUG 04 Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004 |
| NEWS EXPRESS | | JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004 |
| NEWS HOURS | | STN Operating Hours Plus Help Desk Availability |
| NEWS INTER | | General Internet Information |
| NEWS LOGIN | | Welcome Banner and News Items |
| NEWS PHONE | | Direct Dial and Telecommunication Network Access to STN |
| NEWS WWW | | CAS World Wide Web Site (general information) |

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 15:49:46 ON 06 AUG 2004

=> file reg

FILE 'REGISTRY' ENTERED AT 15:50:04 ON 06 AUG 2004

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 AUG 2004 HIGHEST RN 722454-60-6

DICTIONARY FILE UPDATES: 4 AUG 2004 HIGHEST RN 722454-60-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

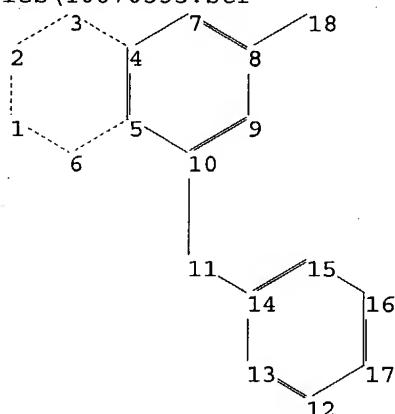
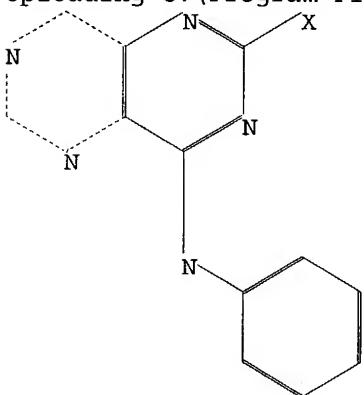
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10670535.str



chain nodes :

11 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17

chain bonds :

8-18 10-11 11-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15
15-16 16-17

exact/norm bonds :

1-2 1-6 2-3 3-4 5-6 10-11 11-14

exact bonds :

8-18

normalized bonds :

4-5 4-7 5-10 7-8 8-9 9-10 12-13 12-17 13-14 14-15 15-16 16-17

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Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS

L1 STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 15:50:23 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 13 TO ITERATE

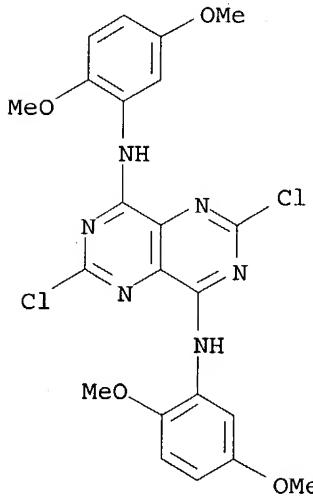
100.0% PROCESSED 13 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 44 TO 476
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> d scan

L2 1 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Pyrimido[5,4-d]pyrimidine, 2,6-dichloro-4,8-bis(2,5-dimethoxyanilino)-
(7CI, 8CI)
MF C22 H20 Cl2 N6 O4



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

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=> s 11 full
FULL SEARCH INITIATED 15:50:44 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 238 TO ITERATE

100.0% PROCESSED 238 ITERATIONS
SEARCH TIME: 00.00.01

29 ANSWERS

L3 29 SEA SSS FUL L1

=> file caold caplus, s 13; s us-6680384/pn
'S' IS AN AMBIGUOUS FILE OR CLUSTER NAME
SAFETY - Occupational Health and Safety Cluster
SESSION - Current files with L-numbers Cluster
STRUCTURE - Structure Searching Cluster
SUPPLIERS - Product Directories and Suppliers Cluster
SCISEARCH - ISI Science Citation Index from 1974 - present
SIGLE - Grey Literature in Europe from 1976 - present
SOLIDSTATE - Solid State and Superconductivity Abstracts from 1981
SOLIS - German literature in social sciences 1945-present
SPECINFO - Spectral Database Information System
STANDARDS - The International Standards Database
STNGUIDE - Descriptive information about STN databases
STNMAIL - STN Electronic Mail Service
SWETSCAN - Swets Table of Contents from 1993 - present
SYNTHLINE - Synthline Drug Synthesis Database 1984-present
ENTER FILE OR CLUSTER NAME (IGNORE):file reg.

'FILE' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE):.

'REG.' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE):.

'L3' IS NOT A VALID FILE NAME

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

ENTER A FILE NAME OR (IGNORE):.

FILE 'CAOLD' ENTERED AT 15:52:00 ON 06 AUG 2004

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L4 1 US-6680384/PN

=> file caold caplus; s 13; s us-6680384/pn
FILE 'CAOLD' ENTERED AT 15:52:19 ON 06 AUG 2004
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FILE 'CAPLUS' ENTERED AT 15:52:19 ON 06 AUG 2004
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L5 14 L3

L6 1 US-6680384/PN

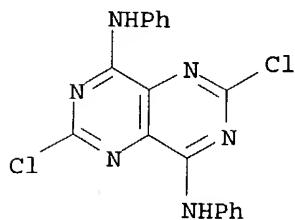
=> s 15 not 16
L7 13 L5 NOT L6

```
=> sort py l7
SORT ENTIRE ANSWER SET? (Y)/N:.
          2 ANSWERS DID NOT HAVE 'PY' SORT FIELD
PROCESSING COMPLETED FOR L7
L8          13 SORT L7 PY
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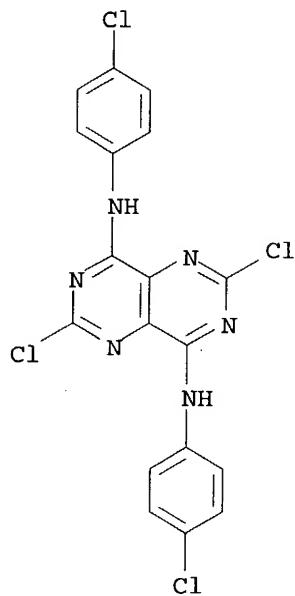
=> d 1-13 cbib pi hitstr

L8 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
 1959:67806 Document No. 53:67806 Original Reference No. 53:12317d-i, 12318a-i, 12319a Derivatives of pyrimido[5,4-d]pyrimidine. (Dr. Karl Thomae G. m. b. H.; Chemisch-pharmazeutische Fabrik). GB 807826 19590121 (Unavailable). APPLICATION: GB .

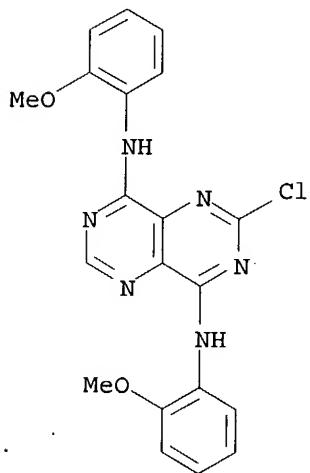
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------|
| PI | GB 807826 | | 19590121 | GB | |
| IT | 93819-72-8, Pyrimido[5,4-d]pyrimidine, 4,8-dianilino-2,6-dichloro-94210-50-1, Pyrimido[5,4-d]pyrimidine, 2,6-dichloro-4,8-bis(p-chloroanilino)-94623-02-6, Pyrimido[5,4-d]pyrimidine, 4,8-di-o-anisidino-2-chloro-94803-23-3, Pyrimido[5,4-d]pyrimidine, 2-chloro-4,8-bis(p-nitroanilino)-95291-50-2, Pyrimido[5,4-d]pyrimidine, 2,6-dichloro-4,8-bis(p-dimethylaminoanilino)-100574-02-5, Ethanol, 2,2'-[(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis(phenylimino)]di-(preparation of) | | | | |
| RN | 93819-72-8 CAPLUS | | | | |
| CN | Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-diphenyl- (9CI) (CA INDEX NAME) | | | | |



RN 94210-50-1 CAPLUS
CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis(4-chlorophenyl)- (9CI) (CA INDEX NAME)

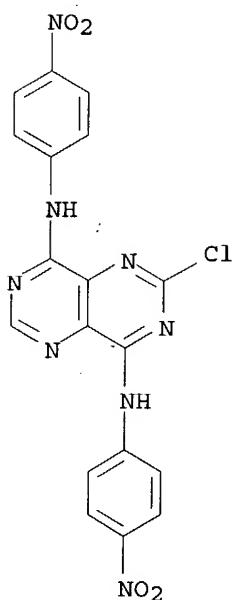


RN 94623-02-6 CAPLUS

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(2-methoxyphenyl)-
(9CI) (CA INDEX NAME)

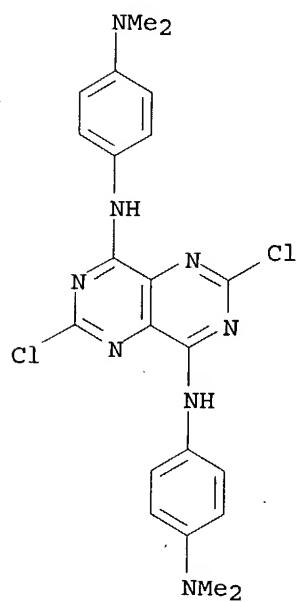
RN 94803-23-3 CAPLUS

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(4-nitrophenyl)-
(9CI) (CA INDEX NAME)



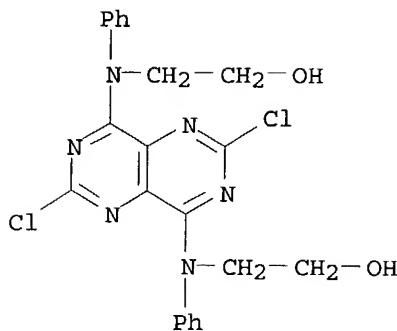
RN 95291-50-2 CAPLUS

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 100574-02-5 CAPLUS

CN Ethanol, 2,2'-(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis(phenylimino)bisis- (9CI) (CA INDEX NAME)



L8 ANSWER 2 OF 13 CAOLD COPYRIGHT 2004 ACS on STN

CA58:11378e pyrimido[5,4-d]pyrimidines. Fischer, Franz C.; Roch, J.; Kottler, A.

pyrimido[5,4-d]pyrimidines. Thomae, Dr. Karl, G.m.b.H.

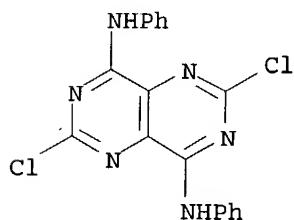
Patent Info.: US 3031450 1962

PATENT NO. KIND DATE

PI US 3031450 1962
IT 93819-72-8 94210-50-1 94623-02-6
94803-23-3 95291-50-2 100574-02-5
101795-31-7

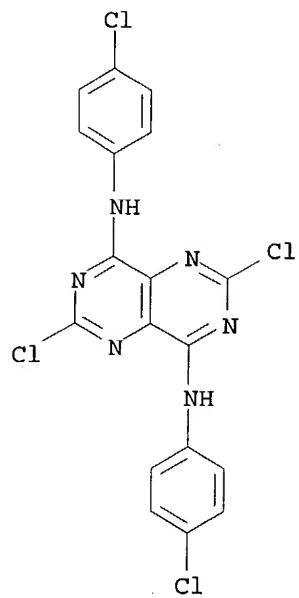
RN 93819-72-8 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-diphenyl- (9CI)
(CA INDEX NAME)

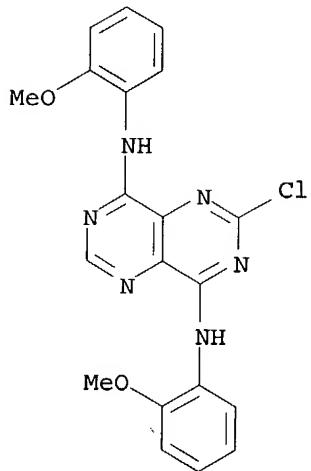


RN 94210-50-1 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis(4-chlorophenyl)- (9CI) (CA INDEX NAME)

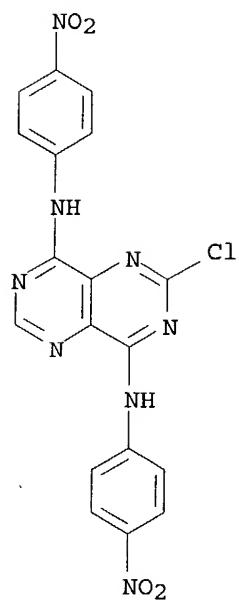


RN 94623-02-6 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(2-methoxyphenyl)-
(9CI) (CA INDEX NAME)

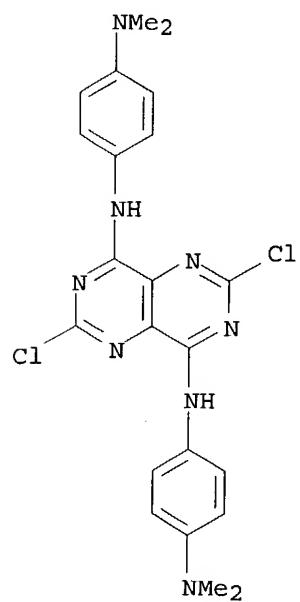
RN 94803-23-3 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(4-nitrophenyl)-
(9CI) (CA INDEX NAME)



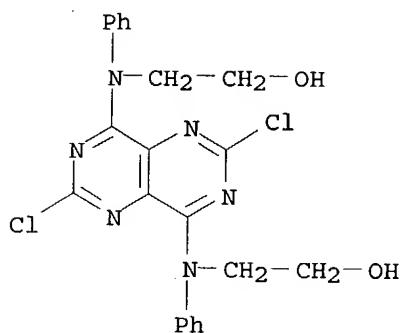
RN 95291-50-2 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



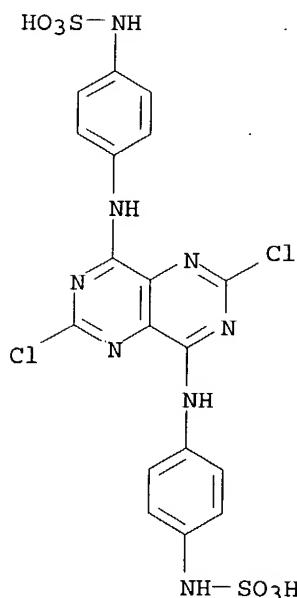
RN 100574-02-5 CAOLD

CN Ethanol, 2,2'-(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis(phenylimino)bis- (9CI) (CA INDEX NAME)



RN 101795-31-7 CAOLD

CN Sulfamic acid, [(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis-(imino-p-phenylene)]di- (7CI) (CA INDEX NAME)



L8 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

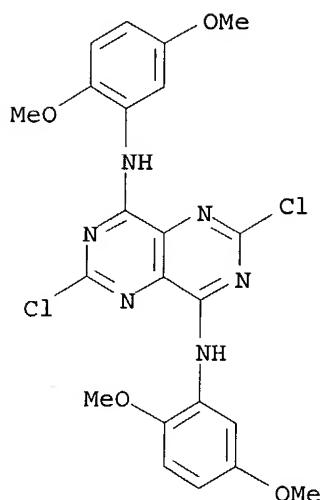
1965:454642 Document No. 63:54642 Original Reference No. 63:9942b-d

Pyrimido[5,4-d]pyrimidines. Giannini, M.; Bacciarelli, C. (Lab. Ric. Ist. Farm. Biol. Malesci, Florence). Bollettino Chimico Farmaceutico, 101(9), 721-7 (Italian) 1962. CODEN: BCFAAI. ISSN: 0006-6648.

IT 2829-71-2, Pyrimido[5,4-d]pyrimidine, 2,6-dichloro-4,8-bis(2,5-dimethoxyanilino)-
(preparation of)

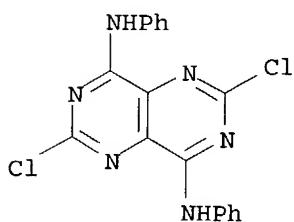
RN 2829-71-2 CAPLUS

CN Pyrimido[5,4-d]pyrimidine, 2,6-dichloro-4,8-bis(2,5-dimethoxyanilino)-
(7CI, 8CI) (CA INDEX NAME)

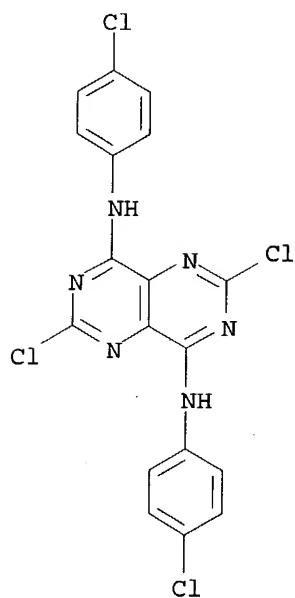


L8 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
 1963:66530 Document No. 58:66530 Original Reference No. 58:11378e-h, 11379a-h, 11380a-h, 11381a-c Pyrimido[5,4-d]pyrimidines. Fischer, Franz G.; Roch, Josef; Kottler, August (Dr. Karl Thomae G.m.b.H.). US 3031450 19620424, 17 pp. (Unavailable). PRIORITY: DE 19590430.

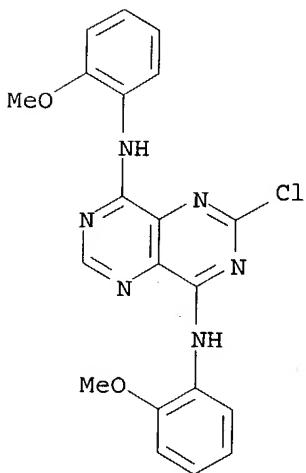
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|-----------------|------|
| PI US 3031450 | | 19620424 | US | |
| IT 93819-72-8 | Pyrimido[5,4-d]pyrimidine, 4,8-dianilino-2,6-dichloro-94210-50-1; Pyrimido[5,4-d]pyrimidine, 2,6-dichloro-4,8-bis(p-chloroanilino)- 94623-02-6; Pyrimido[5,4-d]pyrimidine, 4,8-di-o-anisidino-2-chloro- 94803-23-3; Pyrimido[5,4-d]pyrimidine, 2-chloro-4,8-bis(p-nitroanilino)- 95291-50-2; Pyrimido[5,4-d]pyrimidine, 2,6-dichloro-4,8-bis[p-(dimethylamino)anilino]- 100574-02-5; Ethanol, 2,2'-[{(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis(phenylimino)}di- 101795-31-7; Sulfamic acid, [{(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis(imino-p-phenylene)}di- (preparation of) | | | |
| RN 93819-72-8 CAPLUS | | | | |
| CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-diphenyl- (9CI) (CA INDEX NAME) | | | | |



RN 94210-50-1 CAPLUS
 CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis(4-chlorophenyl)- (9CI) (CA INDEX NAME)

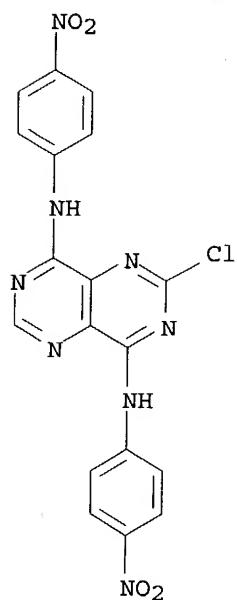


RN 94623-02-6 CAPLUS

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(2-methoxyphenyl) -
(9CI) (CA INDEX NAME)

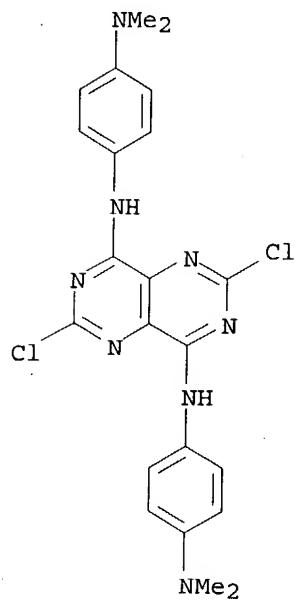
RN 94803-23-3 CAPLUS

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(4-nitrophenyl) -
(9CI) (CA INDEX NAME)



RN 95291-50-2 CAPLUS

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)

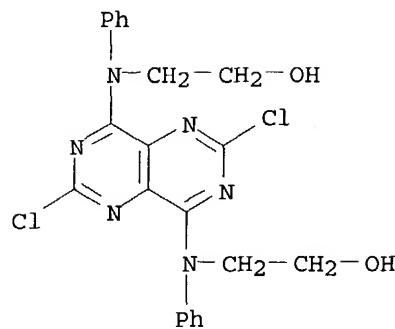


RN 100574-02-5 CAPLUS

CN Ethanol, 2,2'-(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis(phenylimino)bis- (9CI) (CA INDEX NAME)

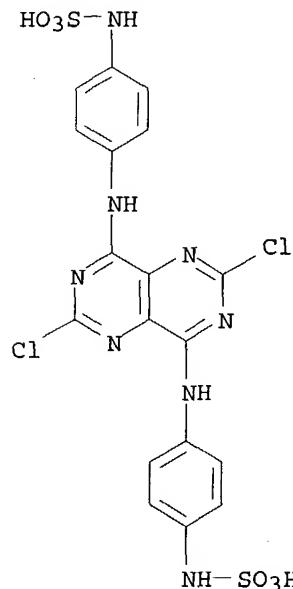
10/670,535

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RN 101795-31-7 CAPLUS

CN Sulfamic acid, [(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis-(imino-p-phenylene)]di- (7CI) (CA INDEX NAME)



L8 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

1969:404488 Document No. 71:4488 Reactive dyes. V. Reactive dyes derived from 2,4,6,8-tetrachloropyrimido[5,4-d]pyrimidine. Iida, Hiroko; Tsukada, Masashi; Iida, Hirotada (Govt. Chem. Ind. Res. Inst., Tokyo, Japan). Kogyo Kagaku Zasshi, 71(12), 2033-7 (Japanese) 1968. CODEN: KGKZA7.

ISSN: 0368-5462.

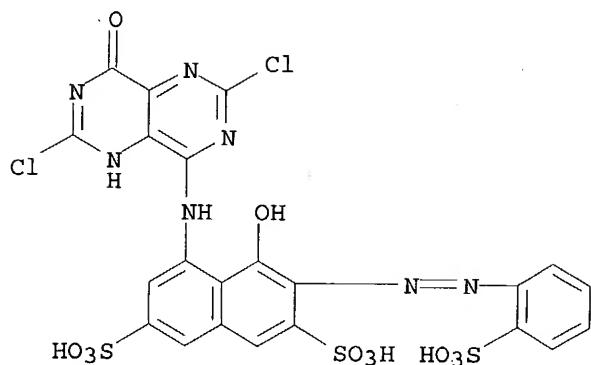
IT 23222-98-2P 23222-99-3P 23223-00-9P

23223-01-0P 23223-02-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 23222-98-2 CAPLUS

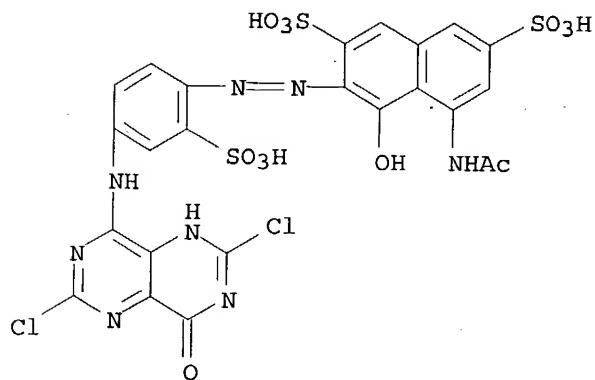
CN 2,7-Naphthalenedisulfonic acid, 5-[(2,6-dichloro-5,8-dihydro-8-oxopyrimido[5,4-d]pyrimidin-4-yl)amino]-4-hydroxy-3-[(2-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



● 3 Na

RN 23222-99-3 CAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-3-[[4-[(2,6-dichloro-5,8-dihydro-8-oxopyrimido[5,4-d]pyrimidin-4-yl)amino]-2-sulfophenyl]azo]-4-hydroxy-, trisodium salt (9CI) (CA INDEX NAME)

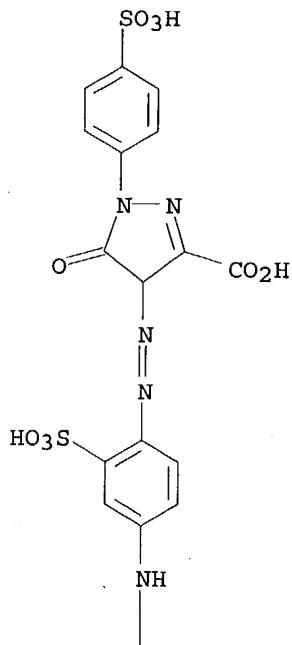


● 3 Na

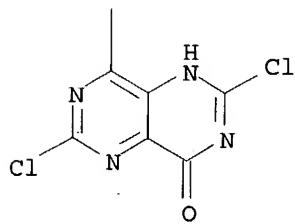
RN 23223-00-9 CAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4-[[4-[(2,6-dichloro-8-hydroxypyrimido[5,4-d]pyrimidin-4-yl)amino]-2-sulfophenyl]azo]-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



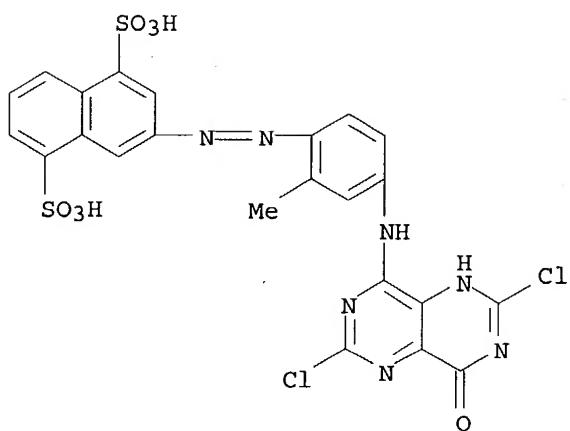
PAGE 2-A



●2 Na

RN 23223-01-0 CAPLUS

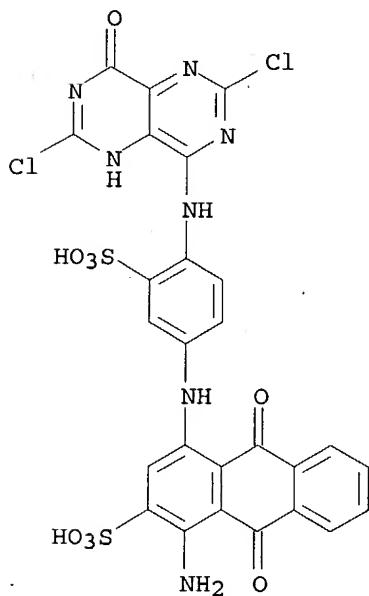
CN 1,5-Naphthalenedisulfonic acid, 3-[[4-[(2,6-dichloro-8-hydroxypyrimido[5,4-d]pyrimidin-4-yl)amino]-3-methylphenyl]azo]-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

RN 23223-02-1 CAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[{4-[(2,6-dichloro-8-hydroxypyrimido[5,4-d]pyrimidin-4-yl)amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

L8 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

1972:490047 Document No. 77:90047 Water-soluble fiber-reactive dyes. Iida,
Hirotada; Iida, Hiroko (Japan, Bureau of Industrial Technology). Jpn.
Tokkyo Koho JP 47008458 B4 19720310 Showa, 4 pp. (Japanese). CODEN:
JAXXAD. APPLICATION: JP 1968-20023 19680329.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| PI JP 47008458 | B4 | 19720310 | JP 1968-20023 | 19680329 |

10/670,535

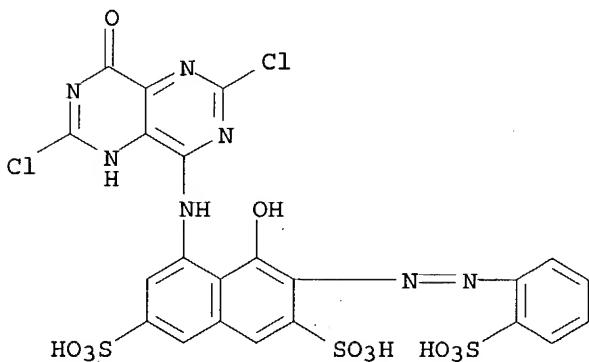
Thomas McKenzie

IT 23222-98-2P 23222-99-3P 23223-00-9P
23223-01-0P 23223-02-1P 38885-26-6P

RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)

RN 23222-98-2 CAPLUS

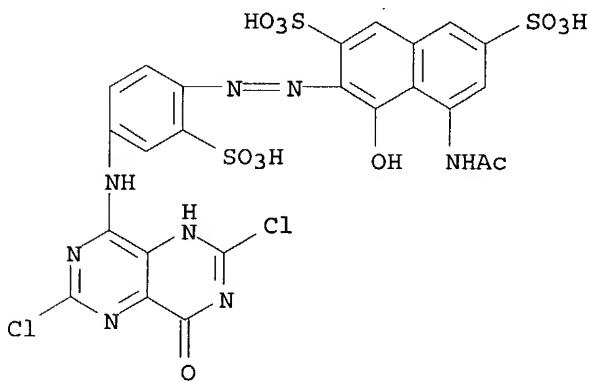
CN 2,7-Naphthalenedisulfonic acid, 5-[(2,6-dichloro-5,8-dihydro-8-oxopyrimido[5,4-d]pyrimidin-4-yl)amino]-4-hydroxy-3-[(2-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



●3 Na

RN 23222-99-3 CAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-3-[[4-[(2,6-dichloro-5,8-dihydro-8-oxopyrimido[5,4-d]pyrimidin-4-yl)amino]-2-sulfophenyl]azo]-4-hydroxy-, trisodium salt (9CI) (CA INDEX NAME)

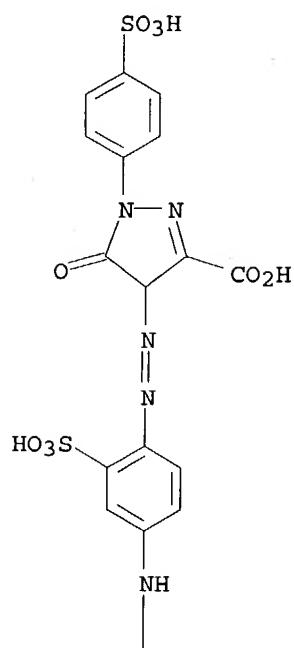


●3 Na

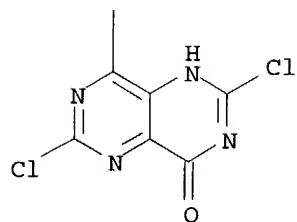
RN 23223-00-9 CAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4-[[4-[(2,6-dichloro-8-hydroxypyrimido[5,4-d]pyrimidin-4-yl)amino]-2-sulfophenyl]azo]-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

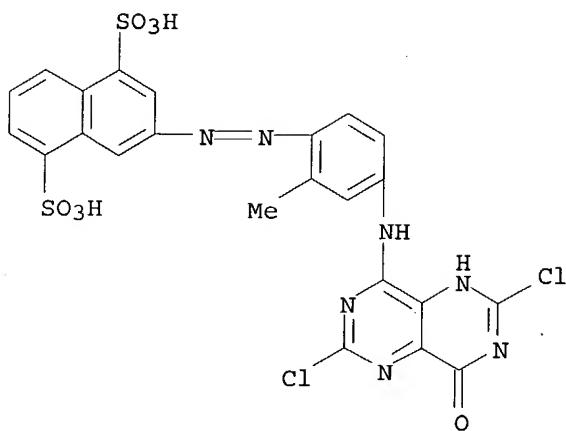


PAGE 2-A



●2 Na

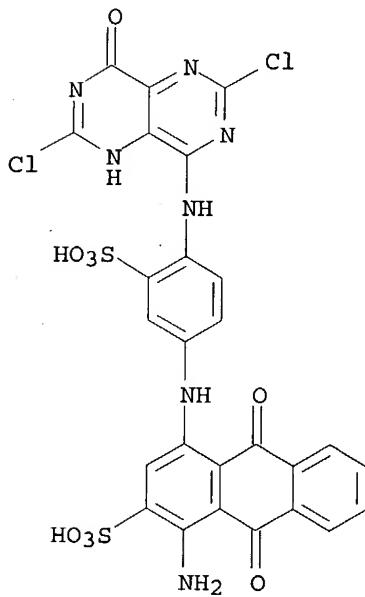
RN 23223-01-0 CAPLUS
 CN 1,5-Naphthalenedisulfonic acid, 3-[[4-[(2,6-dichloro-8-hydroxypyrimido[5,4-d]pyrimidin-4-yl)amino]-3-methylphenyl]azo]-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

RN 23223-02-1 CAPLUS

CN 2-Anthracenesulfonic acid, 1-amino-4-[[4-[(2,6-dichloro-8-hydroxypyrimido[5,4-d]pyrimidin-4-yl)amino]-3-sulfophenyl]amino]-9,10-dihydro-9,10-dioxo-, disodium salt (9CI) (CA INDEX NAME)

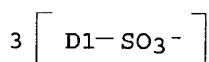
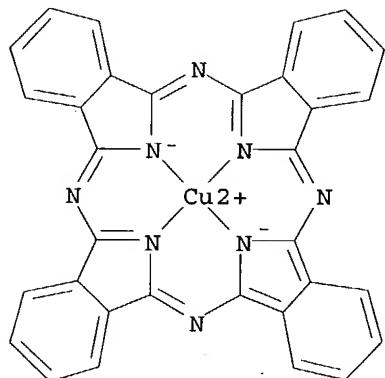


●2 Na

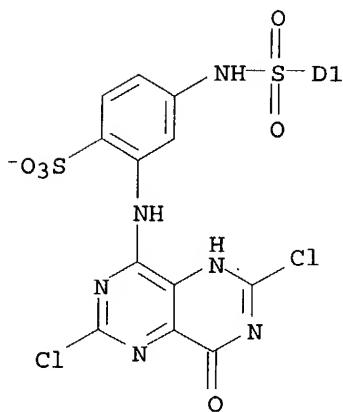
RN 38885-26-6 CAPLUS

CN Cuprate(4-), [C-[[[3-[(2,6-dichloro-8-hydroxypyrimido[5,4-d]pyrimidin-4-yl)amino]-4-sulfophenyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C,C-trisulfonato(6-) -N29,N30,N31,N32]-, tetrahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

● 4 H⁺

L8 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
 1986:186450 Document No. 104:186450 8-(Alkylthio)-2-piperazinopyrimido[5,4-d]pyrimidines. Roch, Josef; Heckel, Armin; Nickl, Josef; Mueller, Erich; Narr, Berthold; Zimmermann, Rainer; Weisenberger, Johannes Dipl Che (Thomae, Dr. Karl, G.m.b.H., Fed. Rep. Ger.). Ger. Offen. DE 3423092 A1 19860102, 32 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1984-3423092 19840622.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|-------|-----------------|-------|
| ----- | ---- | ----- | ----- | ----- |

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|----|---|----|----------|-----------------|----------|
| PI | DE 3423092 | A1 | 19860102 | DE 1984-3423092 | 19840622 |
| | EP 167817 | A1 | 19860115 | EP 1985-106900 | 19850604 |
| | EP 167817 | B1 | 19890920 | | |
| | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| AT | 46511 | E | 19891015 | AT 1985-106900 | 19850604 |
| US | 4714698 | A | 19871222 | US 1985-745095 | 19850617 |
| FI | 8502445 | A | 19851223 | FI 1985-2445 | 19850620 |
| FI | 80455 | B | 19900228 | | |
| FI | 80455 | C | 19900611 | | |
| NO | 8502514 | A | 19851223 | NO 1985-2514 | 19850621 |
| NO | 161620 | B | 19890529 | | |
| NO | 161620 | C | 19890906 | | |
| DK | 8502822 | A | 19851223 | DK 1985-2822 | 19850621 |
| AU | 8543968 | A1 | 19860102 | AU 1985-43968 | 19850621 |
| AU | 579869 | B2 | 19881215 | | |
| JP | 61015883 | A2 | 19860123 | JP 1985-135820 | 19850621 |
| JP | 06094465 | B4 | 19941124 | | |
| ES | 544417 | A1 | 19860201 | ES 1985-544417 | 19850621 |
| ZA | 8504683 | A | 19870225 | ZA 1985-4683 | 19850621 |
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| IL | 75596 | A1 | 19880930 | IL 1985-75596 | 19850621 |

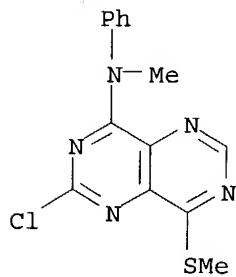
IT 101850-63-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and aminolysis of, by piperazine)

RN 101850-63-9 CAPLUS

CN Pyrimido[5,4-d]pyrimidin-4-amine, 2-chloro-N-methyl-8-(methylthio)-N-phenyl- (9CI) (CA INDEX NAME)



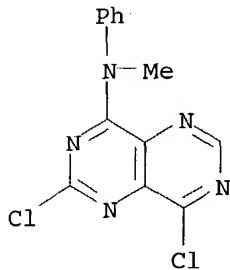
IT 101850-48-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and thiolation of, by methanethiol)

RN 101850-48-0 CAPLUS

CN Pyrimido[5,4-d]pyrimidin-4-amine, 2,8-dichloro-N-methyl-N-phenyl- (9CI) (CA INDEX NAME)



L8 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

1996:371898 Document No. 125:33669 Preparation of 4-

(phenylamino)pyrimido[5,4-d]pyrimidines as epidermal growth factor receptor antagonists. Himmelsbach, Frank; Von Rueden, Thomas; Dahmann, Georg; Metz, Thomas (Dr. Karl Thomae GmbH, Germany). PCT Int. Appl. WO 9607657 A1 19960314, 231 pp. DESIGNATED STATES: W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SK, TJ, TM, TT, UA, UG, UZ, VN; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (German). CODEN: PIXXD2. APPLICATION: WO 1995-EP3482 19950905. PRIORITY: DE 1994-4431867 19940907; DE 1995-19503151 19950201; DE 1995-19521386 19950613; DE 1995-19528672 19950804.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| PI WO 9607657 | A1 | 19960314 | WO 1995-EP3482 | 19950905 |

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| W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SK, TJ, TM, TT, UA, UG, UZ, VN | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | |

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|---|----|----------|------------------|----------|
| DE 4431867 | A1 | 19960314 | DE 1994-4431867 | 19940907 |
| DE 19503151 | A1 | 19960808 | DE 1995-19503151 | 19950201 |
| DE 19521386 | A1 | 19961219 | DE 1995-19521386 | 19950613 |
| DE 19528672 | A1 | 19970206 | DE 1995-19528672 | 19950804 |
| AU 9535218 | A1 | 19960327 | AU 1995-35218 | 19950905 |
| AU 688972 | B2 | 19980319 | | |
| EP 779888 | A1 | 19970625 | EP 1995-931988 | 19950905 |
| EP 779888 | B1 | 19990428 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 10505078 | T2 | 19980519 | JP 1995-509206 | 19950905 |
| NO 9701038 | A | 19970506 | NO 1997-1038 | 19970306 |
| BG 62969 | B1 | 20001229 | BG 1997-101289 | 19970306 |
| FI 9700968 | A | 19970506 | FI 1997-968 | 19970307 |
| HK 1000837 | A1 | 20001103 | HK 1997-102471 | 19971217 |

IT 176637-03-9P 176637-04-0P 176637-11-9P

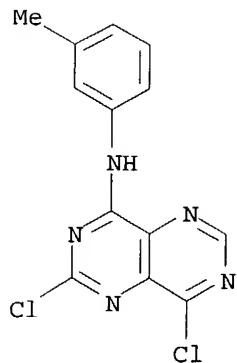
176637-89-1P 176637-90-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 4-(phenylamino)pyrimido[5,4-d]pyrimidines as epidermal growth factor receptor antagonists)

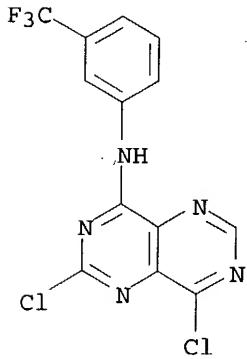
RN 176637-03-9 CAPLUS

CN Pyrimido[5,4-d]pyrimidin-4-amine, 2,8-dichloro-N-(3-methylphenyl)- (9CI)
(CA INDEX NAME)



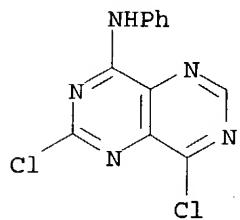
RN 176637-04-0 CAPLUS

CN Pyrimido[5,4-d]pyrimidin-4-amine, 2,8-dichloro-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



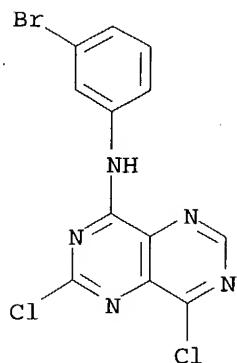
RN 176637-11-9 CAPLUS

CN Pyrimido[5,4-d]pyrimidin-4-amine, 2,8-dichloro-N-phenyl- (9CI) (CA INDEX NAME)

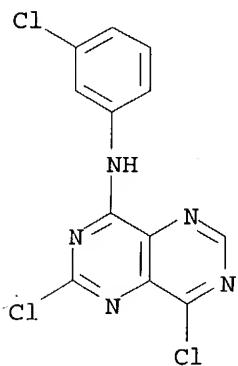


RN 176637-89-1 CAPLUS

CN Pyrimido[5,4-d]pyrimidin-4-amine, N-(3-bromophenyl)-2,8-dichloro- (9CI) (CA INDEX NAME)



RN 176637-90-4 CAPLUS

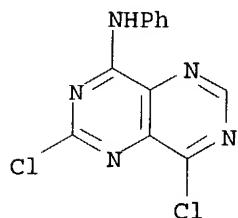
CN Pyrimido[5,4-d]pyrimidin-4-amine, 2,8-dichloro-N-(3-chlorophenyl)- (9CI)
(CA INDEX NAME)

L8 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

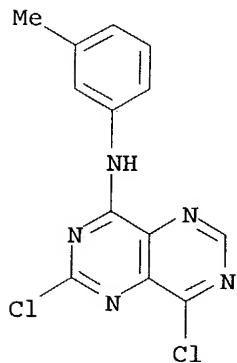
1996:303725 Document No. 124:343326 Preparation of substituted
4-aminopyrimido[5,4-d]pyrimidine antineoplastic agents. Himmelsbach,
Frank; Von rueden, Thomas (Dr. Karl Thomae GmbH, Germany). Ger. Offen. DE
4431867 A1 19960314, 39 pp. (German). CODEN: GWXXBX. APPLICATION: DE
1994-4431867 19940907.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| PI DE 4431867 | A1 | 19960314 | DE 1994-4431867 | 19940907 |
| TW 414798 | B | 20001211 | TW 1995-84109086 | 19950831 |
| CA 2199401 | AA | 19960304 | CA 1995-2199401 | 19950905 |
| WO 9607657 | A1 | 19960314 | WO 1995-EP3482 | 19950905 |
| W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE,
KG, KP, KR, KZ, LK, LR, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU,
SD, SG, SK, TJ, TM, TT, UA, UG, UZ, VN | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
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SN, TD, TG | | | | |
| AU 9535218 | A1 | 19960327 | AU 1995-35218 | 19950905 |
| AU 688972 | B2 | 19980319 | | |
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| EP 779888 | B1 | 19990428 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |

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| CN 1047778 | B 19991229 | | |
| JP 10505078 | T2 19980519 | JP 1995-509206 | 19950905 |
| HU 77744 | A2 19980728 | HU 1998-482 | 19950905 |
| AT 179420 | E 19990515 | AT 1995-931988 | 19950905 |
| ES 2133800 | T3 19990916 | ES 1995-931988 | 19950905 |
| JP 3184533 | B2 20010709 | JP 1996-509206 | 19950905 |
| ZA 9507464 | A 19970306 | ZA 1995-7464 | 19950906 |
| US 5707989 | A 19980113 | US 1995-524707 | 19950907 |
| NO 9701038 | A 19970506 | NO 1997-1038 | 19970306 |
| BG 62969 | B1 20001229 | BG 1997-101289 | 19970306 |
| FI 9700968 | A 19970506 | FI 1997-968 | 19970307 |
| HK 1000837 | A1 20001103 | HK 1997-102471 | 19971217 |
| IT 176637-11-9 | | | |
| RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of substituted 4-aminopyrimido[5,4-d]pyrimidine antineoplastic agents) | | | |
| RN 176637-11-9 | CAPLUS | | |
| CN Pyrimido[5,4-d]pyrimidin-4-amine, 2,8-dichloro-N-phenyl- (9CI) (CA INDEX NAME) | | | |



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|--|--------------|--------------|--|
| IT 176637-03-9P | 176637-04-0P | 176637-89-1P | |
| 176637-90-4P | | | |
| RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of substituted 4-aminopyrimido[5,4-d]pyrimidine antineoplastic agents) | | | |
| RN 176637-03-9 | CAPLUS | | |
| CN Pyrimido[5,4-d]pyrimidin-4-amine, 2,8-dichloro-N-(3-methylphenyl)- (9CI) (CA INDEX NAME) | | | |

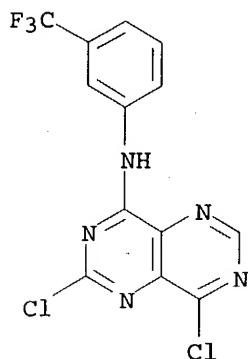


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| RN 176637-04-0 | CAPLUS | | |
| CN Pyrimido[5,4-d]pyrimidin-4-amine, 2,8-dichloro-N-[3- | | | |

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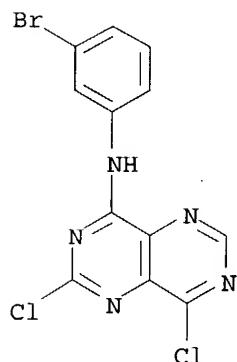
Thomas McKenzie

(trifluoromethyl)phenyl] - (9CI) (CA INDEX NAME)



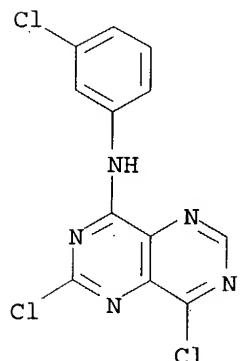
RN 176637-89-1 CAPLUS

CN Pyrimido[5,4-d]pyrimidin-4-amine, N-(3-bromophenyl)-2,8-dichloro- (9CI)
(CA INDEX NAME)



RN 176637-90-4 CAPLUS

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(CA INDEX NAME)



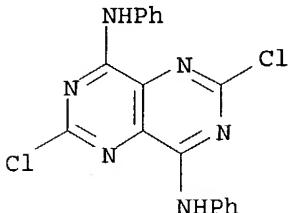
L8 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

10/670,535

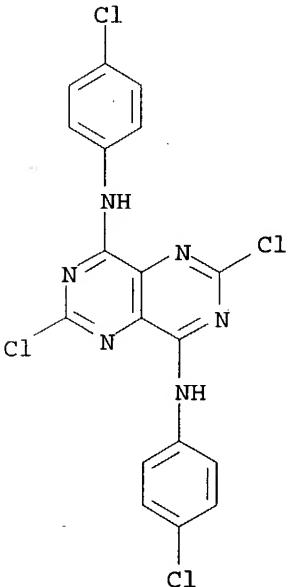
Thomas McKenzie

2001:355083 Document No. 134:353321 Pyrimido[5,4-d]pyrimidine and [(alkylsulfonyl)benzylidene]indeneacetate combinations as antitumor agents. Pamukcu, Rifat; Piazza, Gary A. (Cell Pathways, Inc., USA). U.S. US 6232312 B1 20010515, 23 pp., Cont. of U.S. Ser. No. 485,471, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1998-27334 19980220. PRIORITY: US 1995-485471 19950607.

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|-----------------|----------|-----------------|----------|
| PI US 6232312 | B1 | 20010515 | US 1998-27334 | 19980220 |
| IT 93819-72-8P 94210-50-1P 94623-02-6P | | | | |
| 94803-23-3P 95291-50-2P 100574-02-5P | | | | |
| RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyrimido[5,4-d]pyrimidine and [(alkylsulfonyl)benzylidene]indeneacetate combinations as antitumor agents) | | | | |
| RN 93819-72-8 | CAPLUS | | | |
| CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-diphenyl- (9CI) | | | | |
| | (CA INDEX NAME) | | | |



RN 94210-50-1 CAPLUS
CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis(4-chlorophenyl)- (9CI) (CA INDEX NAME)

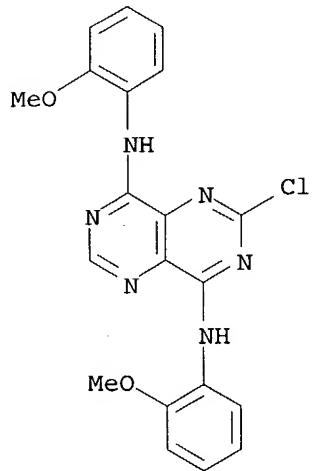


RN 94623-02-6 CAPLUS

10/670,535

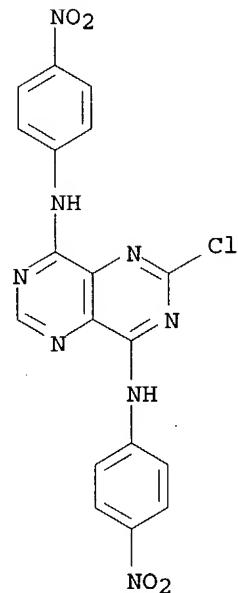
Thomas McKenzie

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(2-methoxyphenyl)-
(9CI) (CA INDEX NAME)



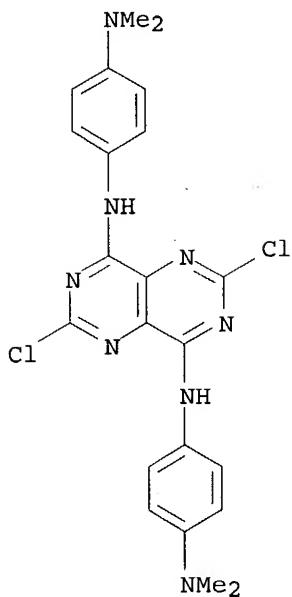
RN 94803-23-3 CAPLUS

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(4-nitrophenyl)-
(9CI) (CA INDEX NAME)

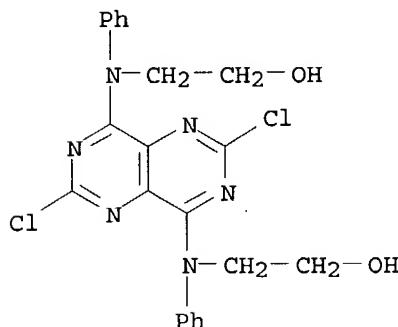


RN 95291-50-2 CAPLUS

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 100574-02-5 CAPLUS
 CN Ethanol, 2,2'-(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis(phenylimino)bis- (9CI) (CA INDEX NAME)



L8 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
 2002:71100 Document No. 136:355098 Controlled stepwise conversion of
 2,4,6,8-tetrachloropyrimido[5,4-d]pyrimidine into 2,4,6,8-tetrasubstituted
 pyrimido[5,4-d]pyrimidines. Northen, Julian S.; Boyle, F. Thomas; Clegg,
 William; Curtin, Nicola J.; Edwards, Andrew J.; Griffin, Roger J.;
 Golding, Bernard T. (Department of Chemistry, University of Newcastle upon
 Tyne, Newcastle upon Tyne, NE1 7RU, UK). Journal of the Chemical Society,
 Perkin Transactions 1 (1), 108-115 (English) 2002. CODEN: JCSPCE. ISSN:
 1472-7781. OTHER SOURCES: CASREACT 136:355098. Publisher: Royal Society
 of Chemistry.

IT 419574-98-4P 419575-06-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

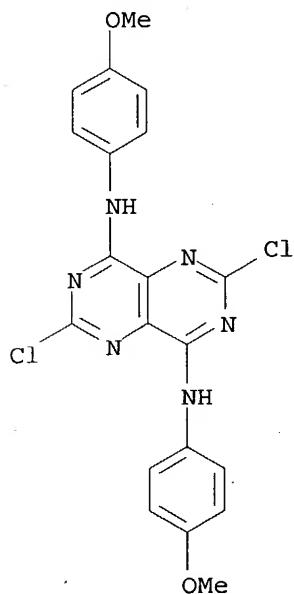
(controlled stepwise conversion of 2,4,6,8-tetrachloropyrimido[5,4-d]pyrimidine into 2,4,6,8-tetrasubstituted pyrimido[5,4-d]pyrimidines)

RN 419574-98-4 CAPLUS

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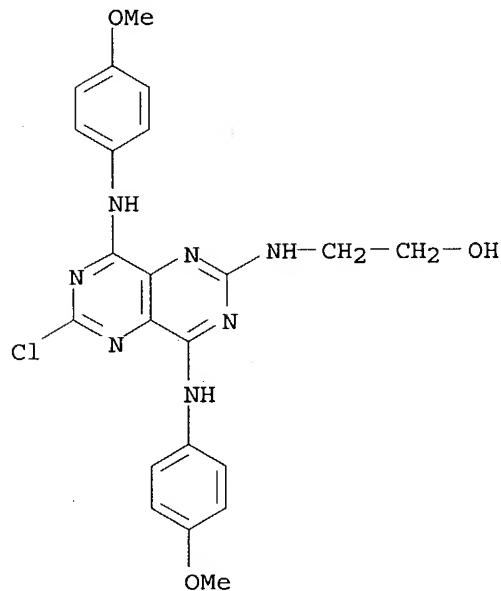
Thomas McKenzie

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 419575-06-7 CAPLUS

CN Ethanol, 2-[6-chloro-4,8-bis[(4-methoxyphenyl)amino]pyrimido[5,4-d]pyrimidin-2-yl]amino]- (9CI) (CA INDEX NAME)

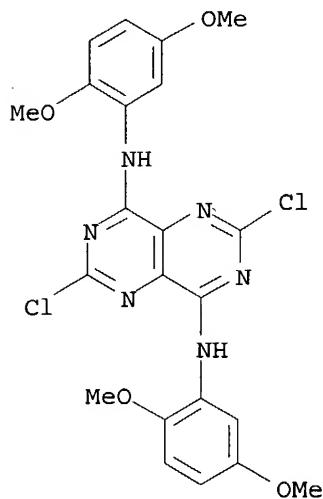


L8 ANSWER 12 OF 13 CAOLD COPYRIGHT 2004 ACS on STN
CA63:9942b pyrimido[5,4,d]primidines. Giannini, Mario; Bacciarelli, C.
IT 2829-71-2
RN 2829-71-2 CAOLD

10/670,535

Thomas McKenzie

CN Pyrimido[5,4-d]pyrimidine, 2,6-dichloro-4,8-bis(2,5-dimethoxyanilino)-
(7CI, 8CI) (CA INDEX NAME)



L8 ANSWER 13 OF 13 CAOLD COPYRIGHT 2004 ACS on STN

CA53:12317d pyrimido 5,4-d pyrimidine derivs.. Thomae, Dr. Karl, G. m. b. H.

Patent Info.: GB 807826; GB 808826; DE 1116676

PATENT NO. KIND DATE

PI GB 807826

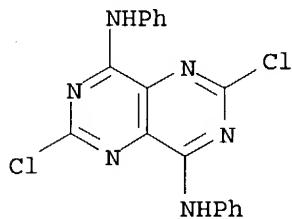
PI GB 808826

DE 1116676

IT 93819-72-8 94210-50-1 94623-02-6
94803-23-3 95291-50-2 100574-02-5

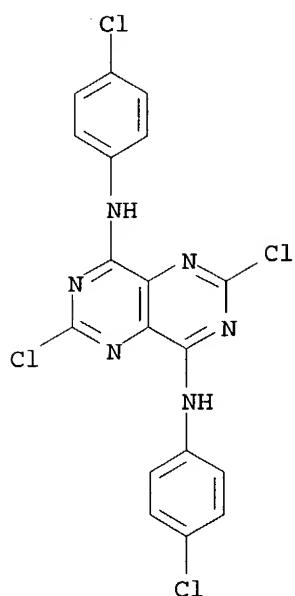
RN 93819-72-8 CAOLD

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(CA INDEX NAME)

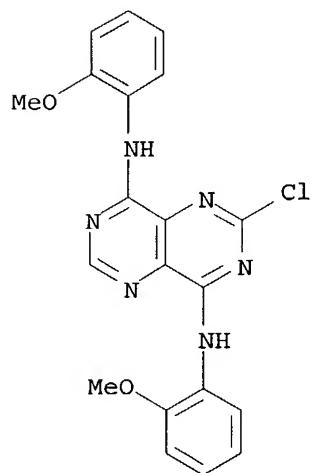


RN 94210-50-1 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis(4-chlorophenyl)- (9CI) (CA INDEX NAME)

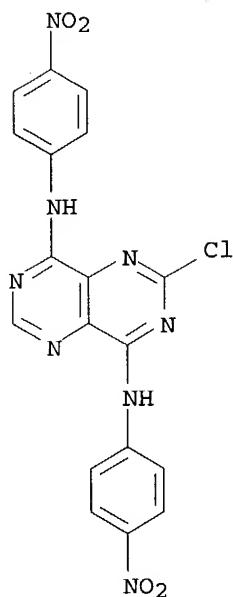


RN 94623-02-6 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(2-methoxyphenyl)-
(9CI) (CA INDEX NAME)

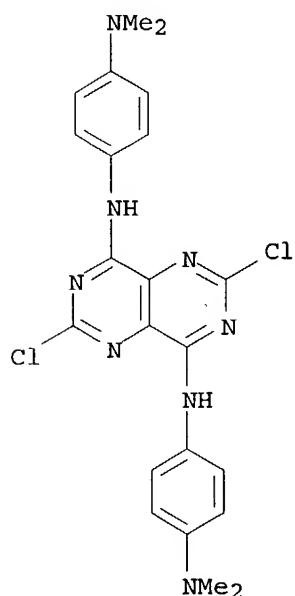
RN 94803-23-3 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2-chloro-N,N'-bis(4-nitrophenyl)-
(9CI) (CA INDEX NAME)



RN 95291-50-2 CAOLD

CN Pyrimido[5,4-d]pyrimidine-4,8-diamine, 2,6-dichloro-N,N'-bis[4-(dimethylamino)phenyl]- (9CI) (CA INDEX NAME)

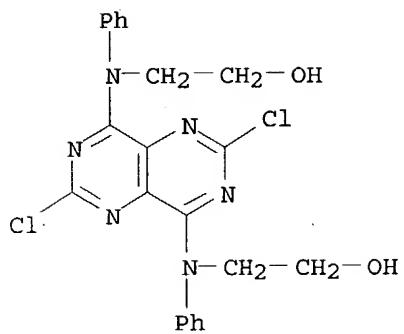


RN 100574-02-5 CAOLD

CN Ethanol, 2,2'-(2,6-dichloropyrimido[5,4-d]pyrimidine-4,8-diyl)bis(phenylimino)bisaniline (9CI) (CA INDEX NAME)

10/670, 535

Thomas McKenzie



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US-PGPUB | 2004/08/06 15:32 |
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US-PGPUB | 2004/08/06 15:32 |

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Friday
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Time:
15:34:21

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Inventor Information for 10/670535

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| LOCK, RALF | MAINZ | GERMANY |
| RALL, WERNER | MITTELBIBERACH | GERMANY |

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